



Fig 2: The moderating effect of task interdependence

Finally, we conducted a structural equation model (SEM) using Mplus 7.0 to examine Hypothesis 4, which proposes that task interdependence moderates workplace friendship–psychological safety–knowledge hiding mediating linkage and the results are presented in Table 4. Results indicated that the negative indirect effect was stronger when task interdependence was high ($\beta = .09$, $SE = 0.04$, $CI = [-0.13, -0.01]$) than when it was low ($\beta = .01$, $SE=0.06$, $CI = [-0.13, 0.11]$). The difference between these indirect effects was significant ($\Delta\beta = -.07$, $SE=0.03$, $CI = [-0.13, -0.01]$). Thus, Hypothesis 4 was supported.

TABLE IV. Moderated mediated results for workplace friendship across levels of task interdependence

Mediator	Level	Conditional indirect effects	S.E.	Est./S.E.	P-Value	LLCI	ULCI
Psychological safety	Low	-0.01	0.06	-0.19	0.85	-0.13	0.11
	High	-0.09	0.04	-2.37	0.02	-0.13	-0.01
	Difference	-0.07	0.03	-2.25	0.01	-0.13	-0.01

Note. Effect size estimates are unstandardized coefficients. Moderator values are the mean.

V. DISCUSSION AND CONCLUSION

Based on conservation of resource theory, we developed and investigated a model explaining how and when workplace friendship influence employees' psychological safety and knowledge hiding. Findings of

analyzing the three waves of data revealed that maintaining a friendship with colleagues at work had the beneficial effects of gaining the resource of psychological safety and, in turn, reducing knowledge hiding behaviour. Moreover, these impacts were constrained by the contextual factor, such that the indirect relationship of workplace friendship and knowledge hiding via psychological safety was significant when task interdependence were high.

5.1 Theoretical Implications

This research provides several important theoretical contributions to the extant literature on workplace friendship. First, we contribute to the workplace friendship literature by investigating the positive effect on knowledge management. Previous research has focused on the positive influence of workplace friendship on employees' knowledge sharing. We provided a comprehensive understanding that workplace friendship is beneficial to inhibit and reduce knowledge hiding behaviour, which can fuel scholars' interest in the relation of interpersonal relationships and knowledge hiding behaviour.

Second, we contribute to the application of conservation of resources theory to the research on the relations of workplace friendship and knowledge hiding. Because knowledge hiding behaviour is considered to be an approach of preserving and retaining personal resources, and workplace friendship is a kind of interpersonal resource, it is necessary and appropriate to explore and examine the influence of workplace friendship on knowledge hiding from the perspective of the resource. Drawing upon conservation of resources theory, we found that workplace friendship can promote the enrichment of individual psychological resources (psychological safety), in turn inhibiting resource preservation (knowledge hiding).

Third, we contribute to the fundamental question of "When do the beneficial consequences of workplace friendship on employee's behaviour?" Specifically, by exploring task interdependence as a key boundary condition, our findings indicated that the level of task interdependence moderated the indirect effect of workplace friendship on knowledge hiding via psychological safety. In a group with high task interdependence, psychological safety has a stronger influence on knowledge hiding. In this regard, the contribution of this study is to contribute theoretically and empirically examines the interaction of influence of individual and contextual factors on knowledge hiding, which provides a preliminary theoretical basis for future research on knowledge hiding at individual, team and organization levels.

The final important contribution is that a sample of the Chinese context is collected to test the proposed model. In order to take better advantage of the positive role of workplace friendships, it is required to have a more comprehensive understanding of workplace friendships. In China, the influence patterns of workplace friendship may be different from that in the West, as the phenomenon of maintaining social relationships permeates into Chinese People's daily social life and is considered an important lifestyle. Therefore, our research benefits scholars' attention to the different functions and influence mechanisms of workplace friendship depending on national culture.

5.2 Practical Implications

In terms of management practice, workplace friendship plays a significant role in employees' cognitive, emotional and behavioural responses and has been found to be a key system for making decisions, mobilizing resources, hiding or transforming information, and performing other work-related functions. Thus we encourage managers to promote building and maintaining friendships between employees to reduce hiding knowledge and information. For example, to enhance friendship at work, organizations can establish a flat organizational structure, promote win-win cooperation of organizational culture, organize team-building activities or festival celebrations to promote deeper communication and cooperation among employees.

Second, task interdependence is a favourable work style to reducing knowledge hiding through frequent, intimate communication and interaction and interdependence among employees. Thus, in task design, managers can strengthen the relevance and interdependence of team tasks and enhance the visibility of tasks among team members, according to the requirement of networked knowledge structure. By doing so, employees and teams are encouraged to form a community of interests, increasing group identity and commitment, which, in turn, reduces knowledge hiding.

5.3 Limitation and Future Research Directions

Our research is not without limitations. First, self-reporting measures are used to assess all our variables. However, regarding self-reported knowledge hiding, prior research argued that employees may be concerned about their own face and have reservations, self-serving bias or dishonesty when filling in the questionnaire, which may result in underestimating behaviour frequencies [30]. Thus, other reporting ways are likely to reflect the nature of knowledge hiding better. In addition, self-reporting is likely to be concerned about common method bias. In this regard, we conducted three waves of surveys among exogenous variables and endogenous variables. However, the data was still collected from a single respondent, and it also may not be possible to avoid the impact of the homologous error. Therefore, future research can use multi-source or other assessment methods to avoid the above problems in the data collection process.

Second, we constructed and examined a theoretical model linking workplace friendship to knowledge hiding from the perspective of individual and contextual factors, which considers several demographic factors as control variables. However, employees' knowledge hiding also is influence by organizational factors, which requires to control these and test our theoretical model or explore the moderating effect of an organizational factor in this model in the future studies.

Third, drawing upon conservation of resources theory, we, focusing on resource perspective, explore a mediating model of the relationship between workplace friendship and knowledge hiding, but other potential mechanisms cannot be ruled out. By exploring other potential mechanisms from different theoretical perspectives, managers can comprehensively understand knowledge hiding and develop a

multi-pronged approach to reduce employees' knowledge hiding behaviour. Future research should capture and explore the influence of social cognition generated in workplace friendship on knowledge hiding, such as relationship identity, belongingness, and perceived insider status.

In addition, other plausible assumptions may exist that workplace friendship may have a positive effect on knowledge hiding across the groups. For example, workplace friendship may increase interpersonal cliques, in which employees' identification and belongingness with the focal dyad or clique may trigger knowledge hiding from others outside this clique. Meanwhile, the perceptions of impenetrable boundaries caused by this focal clique increase the feeling excluded of employees outside focal dyad or clique, which may also lead to hiding knowledge to the members in this clique [1].

5.4 Conclusion

This research represents an initial attempt to investigate the influence of workplace friendship on knowledge hiding. In particular, we highlight the potential benefits of such positive interpersonal relationships and resources for employees, including psychological resources and knowledge hiding behaviour. This beneficial impact was furthermore strengthened by task interdependence. To sum up, the mediated moderation model of this research reveals how and when friendship at work is of significance to employees and organizations. Our findings contribute to the management practice that effectively reduces knowledge hiding through enhancing psychological safety originated from workplace friendship or intervening of task interdependence in the group. Moreover, we expect our study will inspire scholars' interest to further explore and uncover the underlying mechanisms of how other interpersonal relationships inhibit knowledge hiding.

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